

GUIDANCE FOR DEVELOPMENT OF SOFTWARE UTILIZING THE NND-CNP

USING THE FOOD INCLUDE (FINCL), FOOD SUBCODE (FSUBCOD) AND FOOD SUBCODE DESCRIPTION (FSUBDES) FILES

(Prepared 4/95)

INTRODUCTION

The complete list of foods in the NND is obtained by combining all of the foods in the FDES, FINCL, and FSUBDES files. The FINCL and FSUBDES files contain foods with unique identities but identical nutrient values as the foods in the FDES file to which they are linked by CNP code number. This organization follows the principles of relational database design in that redundancy is eliminated from the NUTVAL file; the unique nutrient profile is listed once per CNP code, no matter how many foods (from the FDES, FINCL or FSUBDES files) are linked to that code. The unique identity of a particular food and its nutrient content are defined by the combination of its food description and its CNP code. The appropriate food description might come from the FDES file (field=descriptor, A200) or the FINCL file (field=include description, A100 in Release 1 of the NND-CCP and A200 in Release 2) or the FSUBDES file (field=subcode descriptor, A100 in Release 1 and A200 in Release 2). The appropriate code is linked to the description in each of these files.

Placement of foods into the FINCL or the FSUBDES file depends on whether the food has the same or different measure-weight data than the CNP code to which it is linked. Foods in the FINCL file have the same weights for measures as the linked CNP food; foods in the FSUBDES file have a different weight for the same measure as the linked CNP food. For this reason, the GMWT file has a field for CNP SUBCODE so that these individual measure-weights can be associated with the correct food. The GMWT file does not have a field for INCLUDE LINE NUMBER because it is unnecessary; INCLUDE foods have the same measure-weight as the CNP code to which they are linked.

The first release of the NNP-CNP (1/94) included a FINCL file with 151 foods, but no FSUBDES or FSUBCOD files since no data was available for foods that would be placed in these files (primarily commercially prepared foods). The second release of the NNP-CNP (expected 6/95) will include SUBCODE foods. Software systems must be prepared to handle the food in these smaller files in the same manner as foods from the much larger FDES file. NO MATTER WHICH FILE FOODS COME FROM, EACH FOOD IS UNIQUE AND MUST BE AVAILABLE TO USERS FOR MENU OR RECIPE ENTRY.

IDENTIFICATION NUMBER FOR AN INCLUDE OR SUBCODE FOOD

As a unique individual food, each INCLUDE or SUBCODE food has a unique identifying code, just as each food in the FDES file has a unique code (CNP CODE). The unique identifying code for a food in the FINCL file is the combination of the 5-digit CNP CODE and the 3-digit (maximum) INCLUDE LINE NUMBER, while the unique identifying code for a food in the FSUBDES file is the 7-digit CNP SUBCODE.

A software vendor could incorporate foods from the FINCL or FSUBDES files into their software's database either by using the complete identifying code from the NND-CNP (maximum of 8 digits) or by assigning unique non-USDA codes to these foods. However the software must display the USDA-assigned CNP CODE and SUBCODE (if applicable) on the ingredient screen for the food so that the user can identify which USDA food is represented (which USDA code is the source of nutrient and measure-weight data). Also, the data for these foods must be "protected" from local editing with a source code of "USDA". Currently, the un-editable "USDA description" for INCLUDE foods should be both the INCLUDE DESCRIPTION and the long DESCRIPTION of the food from the FDES file to which the INCLUDE food is linked (with which it shares nutrient values). In future, after Release 2 of the NND-CNP, only the specific INCLUDE or SUBCODE DESCRIPTIONs should be displayed and protected from editing.

There may be other ways to maintain the independence of INCLUDE and SUBCODE foods, but these foods must be AUTOMATICALLY incorporated into the software database; manual entry of the data by the software vendor is not acceptable.

DATA FIELDS IN THE FOOD INCLUDE (FINCL) FILE

The attached sample file listing shows example of each of these fields:

CNP CODE links the INCLUDE food to the nutrient profile in the NUTVAL file, to the measure-weight data in the GMWT file and to the FOOD GROUP CODE in the FDES file. The FDES file also contains the descriptions for the similar food to which the INCLUDE food is linked. Using the first release of the NND-CNP, it may take a combination of the (long) DESCRIPTOR from the FDES file and the INCLUDE DESCRIPTION from the FINCL file to fully identify some INCLUDE foods. With Release 2 this will no longer be necessary (see discussion under INCLUDE DESCRIPTION).

INCLUDE LINE NUMBER is unique to each include food linked to a CNP CODE. The line number by itself is not a unique identifying code for the food. A specific food in the FINCL file is identified by the combination of its CNP CODE and its INCLUDE LINE NUMBER. The INCLUDE LINE NUMBER assigned to a particular food will not change in future releases of the NND-CDP.

BRAND/LABEL CODE is blank for all the foods currently in the FINCL file of release 1. This field would contain data for a brand-specific food. (Users need to see this data when it exists.)

INCLUDE DESCRIPTION (or BRAND/LABEL NAME for brand specific foods) is the specific description for the food. In release 1 of NND-CDP, the INCLUDE DESCRIPTION is not a stand-alone description for a food; there are a number of foods named only by qualifying phrases such as "with fruit" (an instant oatmeal). The complete identification of an INCLUDE food is linked. For example, for the food item identified with the CNP code #1029, Include line #4 the complete description would be:

INCLUDE DESCRIPTION (Specific Food) = cheese curds

CNP DESCRIPTION (Similar Food) = Cheese, mozzarella,...

(Currently, users need to see both descriptions for an INCLUDE food).

In the second release of the NND_CDP (due June 1995) these “double descriptions” will no longer be necessary; the INCLUDE DESCRIPTION will be expanded to a 200 character field (from 100) and the descriptions will be revised to be complete “stand-alone” descriptions of the foods in the FINCL file. Instead of having to use a concatenation of the CNP DESCRIPTOR and the INCLUDE DESCRIPTION, a software developer can describe this type of food item utilizing just the INCLUDE DESCRIPTION.

DATE ADDED, LAST MODIFIED and STATUS fields are included to assist the software developer in updating their database when a new version of the NND-CDP is released. These fields identify which data have been added, modified or discontinued since the previous release. (Users do not need to see this data).

Note: These two fields will be added to the FINCL file with Release 2 of the NND-CDP:

PRODUCT CODE (A15)

ABBREVIATED DESCRIPTOR (A60)

(Users will need to see the data in both of these fields).

DATA COMBINATION FOR INCLUDE FOODS

In order to make the INCLUDE foods available to users for menu and recipe entry, the software must collect the following information from:

FINCL file: complete code number (combination of CNP CODE and INCLUDE LINE NUMBER) and INCLUDE DESCRIPTION.

FDES file: FOOD GROUP CODE and DESCRIPTOR and/or ABBREVIATED DESCRIPTOR (to supplement the incomplete INCLUDE DESCRIPTION).

GMWT and MDES files: GRAM WEIGHT (of specific measures) and DESCRIPTION (of each measure).

NUTVAL and NUTDES files: NUTRIENT VALUEs and
NUTRIENT DESCRIPTIONs

FOOD SUBCODE (FSUBCOD) AND FOOD SUBCODE DESCRIPTION (FSUBDES) FILES

These files were not included with Release 1 of the NND-CNP. However, the design of the software must provide for the inclusion of these records. Release 2 will include data in these files.

Release 2 of the NND-CNP will also include some changes to the FSUBDES file. Fields added to the FSUBDES file in Release 2 include:

PRODUCT CODE (A15)
ABBREVIATED DESCRIPTOR (A60)

Fields modified include:

SUBCODE DESCRIPTOR (expanded from A100 to A200)

Sample File Listing
FINCL FILE AS RELEASED WITH CN1
(Fincl.rl, total records = 151)

Printed: 4/10/95

Data as of 1/31/94

CNP Code	Include line #	Brand/Label Code	Include Description	Date Added	Last Modified	Status
1012	1		farmers	1/31/1994		a
1016	1		pot cheese	1/31/1994		a
1029	1		pizza cheese	1/31/1994		a
1029	2		string cheese	1/31/1994		a
1029	3		cheese sticks	1/31/1994		a
1029	4		cheese curds	1/31/1994		a
1029	5		"lowfat" Mozzarella	1/31/1994		a
1037	1		Mexican style farmer cheese	1/31/1994		a
1052	1		coffee cream	1/31/1994		a
1052	2		table cream	1/31/1994		a
1077	1		leche fresca	1/31/1994		a
1088	1		Kefir milk	1/31/1994		a
1110	1		thick shake mix, milk added	1/31/1994		a
1111	1		thick shake mix, milk added	1/31/1994		a
1119	1		liquid yogurt	1/31/1994		a
1121	1		custard style	1/31/1994		a
4114	1		vinaigrette dressing	1/31/1994		a
6112	1		Oriental barbeque sauce	1/31/1994		a
6116	1		brown gravy	1/31/1994		a
6116	2		Swiss steak gravy	1/31/1994		a
6413	1		chicken broth powder, reconstituted	1/31/1994		a
6419	1		chicken and stars soup	1/31/1994		a
6468	1		vegetable with dumplings	1/31/1994		a
6468	2		alphabet vegetable soup	1/31/1994		a

FOOD ITEMS FROM FOOD INCLUDE (FINCL) FILE

(Foods with unique identity but the same nutrients and weights-for-measures and the CNP code to which they are linked).

Printed 4/13/95

Data as of 1/31/94

CNP #	Include line #	Include Description	Long Description of linked CNP Code
1012	1	farmers	Cheese; cottage, creamed, large or small curd
1016	1	pot cheese	Cheese; cottage, low fat, 1% fat
1029	1	pizza cheese	Cheese; mozzarella, part skim milk, low moisture
1029	2	string cheese	Cheese; mozzarella, part skim milk, low moisture
1029	3	cheese sticks	Cheese; mozzarella, part skim milk, low moisture
1029	4	cheese curds	Cheese; mozzarella, part skim milk, low moisture
1029	5	"low fat" Mozzarella	Cheese; mozzarella, part skim milk, low moisture
1037	1	Mexican style farmer cheese	Cheese; ricotta, part skim milk
1052	1	coffee cream	Cream; light whipping
1052	2	table cream	Cream; light whipping
1077	1	leche fresca	Milk; whole 3.3% fat
1088	1	Kefir milk	Milk; buttermilk, cultured, from skim milk
1110	1	thick shake mix, milk added	Milk shakes; thick chocolate
1111	1	thick shake mix, milk added	Milk shakes; thick vanilla
1119	1	liquid yogurt	Yogurt; vanilla, low fat, 11 g protein per 8 oz
1121	1	custard style	Yogurt; fruit, low fat, 10 g protein per 8 oz
4114	1	vinaigrette dressing	Salad dressing; Italian, commercial, regular, w/salt
6112	1	Oriental barbeque sauce	Teriyaki sauce, ready-to-eat
6116	1	brown gravy	Gravy; beef, canned
6116	2	Swiss steak gravy	Gravy; beef, canned
6413	1	chicken broth powder, reconstituted	Soup; chicken broth, canned, prepared with equal volume water, commercial
6419	1	chicken and stars soup	Soup; chicken noodle, canned, prepared with equal volume water, commercial

CNP #	Include line #	Include Description	Long Description of linked CNP Code
6468	1	vegetable with dumplings	Soup; vegetarian vegetable, canned, prepared with equal volume water, commercial
6468	2	alphabet vegetable soup	Soup; vegetarian vegetable, canned, prepared with equal volume water, commercial
6471	1	vegetable with meat soup	Soup; vegetable beef, canned, prepared with equal volume water, commercial
7011	1	chicken bologna	Turkey bologna
7038	1	knoblauch	Sausage; knockwurst
7043	1	smoked	Luncheon meat; beef, thin sliced
7043	2	pressed	Luncheon meat; beef, thin sliced
7068	1	kosher salami	Luncheon meat; salami; beef, cooked
7069	1	cotto salami	Luncheon meat; salami; beef and pork, cooked
7069	2	beer bologna	Luncheon meat; salami; beef and pork, cooked
7069	3	beer sausage	Luncheon meat; salami; beef and pork, cooked
7069	4	beerwurst	Luncheon meat; salami; beef and pork, cooked
7089	1	hot links	Sausage; Italian, cooked
8017	1	all flavors	Cereals; Cookie-Crisp, chocolate chip & vanilla, (corn w/other grains)
8031	1	all flavors	Cereals; Frosted Mini-wheats, sugar-frosted & brown sugar cinnamon, (wheat)
8109	1	farina	Cereals; cream of wheat, mix'n eat; plain, prep w/water, (wheat, corn)
8109	2	with fruit	Cereals; cream of wheat, mix'n eat; plain, prep w/water, (wheat, corn)
8109	3	with spices	Cereals; cream of wheat, mix'n eat; plain, prep w/water, (wheat, corn)
8109	4	with maple and brown sugar	Cereals; cream of wheat, mix'n eat; plain, prep w/water, (wheat, corn)
8123	1	with spices	Cereals; oatmeal, instant, fortified, plain, prep w/water
8123	2	with fruit	Cereals; oatmeal, instant, fortified, plain, prep w/water
8123	3	with nuts	Cereals; oatmeal, instant, fortified, plain, prep w/water

CNP #	Include line #	Include Description	Long Description of linked CNP Code
9016	1	cider	Apple juice; canned or bottled, unsweetened, wo/added vitamin C
9016	2	sparkling cider	Apple juice; canned or bottled, unsweetened, wo/added vitamin C
9040	1	Cavendish	Bananas; raw
9040	2	dwarf	Bananas; raw
9040	3	finger	Bananas; raw
9046	1	dewberries	Blackberries; canned, heavy syrup, solids & liquid
9046	2	youngberries	Blackberries; canned, heavy syrup, solids & liquid
9046	3	marionberries	Blackberries; canned, heavy syrup, solids & liquid
9131	1	concord	Grapes; American type (with skin), raw
9164	1	frozen	Litchis; raw
9183	1	Crenshaw melon	Melons; casaba, raw
9218	1	mandarin orange, fresh	Tangerines; raw
9218	2	Satsuma	Tangerines; raw
9284	1	plum sauce	Plums; canned, purple, heavy syrup pack, solids & liquid
9292	1	prune compote	Prunes; dried, stewed, wo/added sugar
9293	1	Ciruelas	Prunes; dried, stewed, wo/added sugar
9298	1	cinnamon-coated raisins	Raisins; seedless
9304	1	red or black raspberries, NS as to raw, cooked, canned or frozen	Raspberries; canned, red, heavy, syrup pack, solids & liquid
10129	1	breakfast strips	Breakfast strips; cured, cooked
10134	1	country ham	Ham; cured, boneless, extra lean (approx 5% fat), roasted
10134	2	cottage ham	Ham; cured, boneless, extra lean (approx 5% fat), roasted
10134	3	picnic ham	Ham; cured, boneless, extra lean (approx 5% fat), roasted
11056	1	pole beans	Beans; green, canned, drained solids
11056	2	Italian beans	Beans; green, canned, drained solids
11056	3	snap beans	Beans; green, canned, drained solids
11056	4	French cut beans	Beans; green, canned, drained solids

CNP #	Include line #	Include Description	Long Description of linked CNP Code
11161	1	collard greens	Collards; raw
11250	1	deer tongue lettuce	Lettuce; (includes Boston and Bibb types), raw
11250	2	native lettuce	Lettuce; (includes Boston and Bibb types), raw
11250	3	red leaf lettuce	Lettuce; (includes Boston and Bibb types), raw
11250	4	Bibb	Lettuce; (includes Boston and Bibb types), raw
11282	1	red onions	Onions; raw
11300	1	pea pod	Peas; snow, raw
11300	2	Chinese pea pod	Peas; snow, raw
11399	1	tater tots	Potato puffs; frozen, prepared
11404	1	fried with skins	Potatoes; frozen, french-fried, fried in vegetable oil
11529	1	plum and Italian tomatoes	Tomatoes; red, ripe, raw
11643	1	pumpkin	Squash; winter, all varieties, raw
11643	2	acorn	Squash; winter, all varieties, raw
11643	3	butternut	Squash; winter, all varieties, raw
11643	4	Hubbard	Squash; winter, all varieties, raw
11940	1	candied dill spears	Pickle, sweet
11940	2	semi-sweet	Pickle, sweet
14238	1	cocktail	Cranberry-apple juice drink; bottled
14238	2	blueberry-cranberry juice drink	Cranberry-apple juice drink; bottled
14238	3	raspberry-cranberry juice drink	Cranberry-apple juice drink; bottled
14238	4	cranberry-apricot juice drink	Cranberry-apple juice drink; bottled
14238	5	cranberry-grape juice drink	Cranberry-apple juice drink; bottled
14238	6	cranberry-strawberry juice drink	Cranberry-apple juice drink; bottled
14323	1	orange ade	Orange drink; canned
15020	1	angelfish	Croaker; atlantic, raw
15020	2	butterflyfish	Croaker; atlantic, raw
15020	3	drumfish	Croaker; atlantic, raw
15020	4	goatfish	Croaker; atlantic, raw
15020	5	kingfish	Croaker; atlantic, raw
15020	6	sea trout	Croaker; atlantic, raw

CNP #	Include line #	Include Description	Long Description of linked CNP Code
15020	7	freshwater sheepshead	Croaker; atlantic, raw
15020	8	spadefish	Croaker; atlantic, raw
15020	9	spot	Croaker; atlantic, raw
15020	10	surgeonfish	Croaker; atlantic, raw
15020	11	weakfish	Croaker; atlantic, raw
15020	12	weke	Croaker; atlantic, raw
15033	1	burbot	Haddock; raw
15033	2	cusk	Haddock; raw
15033	3	hake	Haddock; raw
15033	4	ling	Haddock; raw
15033	5	monkfish	Haddock; raw
15033	6	pollock	Haddock; raw
15033	7	scrod	Haddock; raw
15046	1	enenui	Mackerel; atlantic, raw
15046	2	garfish	Mackerel; atlantic, raw
15046	3	ono	Mackerel; atlantic, raw
15046	4	needlefish	Mackerel; atlantic, raw
15046	5	wahoo	Mackerel; atlantic, raw
15057	1	bocaccio	Ocean perch; atlantic, raw
15057	2	menpachi	Ocean perch; atlantic, raw
15057	3	orange roughy	Ocean perch; atlantic, raw
15057	4	redfish	Ocean perch; atlantic, raw
15057	5	rockfish	Ocean perch; atlantic, raw
15057	6	bocaccio	Ocean perch; atlantic, raw
15057	7	orange roughy	Ocean perch; atlantic, raw
15057	8	menpachi	Ocean perch; atlantic, raw
15057	9	redfish	Ocean perch; atlantic, raw
15057	10	rockfish	Ocean perch; atlantic, raw
15234	1	bullhead	Catfish; channel, farmed, raw
19003	1	barbecue-flavored chips	Corn chips, plain
19008	1	spirals	Corn puffs or twists, cheese-flavor
19034	1	low fat microwave popcorn	Popcorn, air-popped

CNP #	Include line #	Include Description	Long Description of linked CNP Code
19035	1	regular microwave popcorn, salted or lightly salted	Popcorn, oil-popped
19045	1	flavored "light" potato chips	Potato chips, made from dried potatoes, light
19047	1	cheese-flavored pretzels	Pretzels, hard, plain, salted
19056	1	flavored or barbecue-flavored	Tortilla chips, plain
19088	1	ice milk, flavors with partial chocolate base	Ice milk, vanilla
19089	1	ice cream, rich, flavors with partial chocolate base	Ice cream, vanilla, rich
19095	1	ice cream, regular, flavors with partial chocolate base	Ice cream, vanilla
19095	2	ice cream, soft serve, flavors with partial chocolate base	Ice cream, vanilla
19096	1	ice milk, soft serve, flavors with partial chocolate base	Ice milk, vanilla, soft serve
19128	1	lite pancake syrup	Syrups, table blends, pancake, reduced-calorie
19280	1	frappe	Ices, water, lime
19296	1	pear honey	Honey, strained or extracted
19296	2	raw honey	Honey, strained or extracted
19335	1	rock sugar	Sugar, granulated
19335	2	rock candy	Sugar, granulated
19349	1	light or dark	Syrups, corn, dark
19410	1	flavored potato chips	Potato chips, made from dried potatoes, plain
19411	1	flavored potato chips	Potato chips, plain, salted

Note: This document was originally distributed as part of a packet of seven guidance documents for software developers. The original was dated May 17, 1995 and signed by Ron Vogel. A copy of the original packet is included in the packet of materials sent to new software developers. The letter and packet are available upon request. This Word document was created on March 6, 2006.